K030443

510(k) Summary - 21 CFR § 807.92(c)

Submitter's Name and Contact Information

Nastech Pharmaceutical Company, Inc (Nastech) 45 Adams Avenue Hauppauge, NY 11788

#### Contact Person

Peter C. Aprile, R.Ph. Vice President, Regulatory and Quality Affairs

#### Summary Preparation Date

10 February, 2003

#### Device Names

Trade Name:

Mammary Aspiration Specimen Cytology Test (MASCT)

Common Name:

**Breast Aspirator** 

Classification Name: Gastroenterology-Urology Biopsy Instrument (21CFR § 876.1075)

#### Substantially Equivalent Device

Substantial equivalence was claimed to Mammary Aspiration Specimen Cytology Test (MASCT; Nastech Pharmaceutical Company, Inc.) and Pro·Duct Catheter (Pro·Duct Health, Inc.)

#### Device Description

The Nastech MASCT device is similar to the non-powered breast aspirators manufactured by Nastech Pharmaceutical Company, Inc. and Pro Duct Health, Inc. used to elicit and collect nipple aspirate fluid (NAF) from the excretory ducts (tubuli lactiferi or galactophori). The device is comprised of a rigid polycarbonate cup in which the sample collection container is inserted. Negative pressure (vacuum) is produced by non-powered (hand) actuations of a lever like handle. The expressed NAF sample is collected on a membrane filter and washed into the sample container using an appropriate fixative solution.

#### Intended Use

The MASCT device is intended for use in the collection of nipple aspirate fluid for cytological testing. The collected fluid can be used in the determination and/or differentiation of normal versus premalignant versus malignant cells.

#### Technological Characteristics

The MASCT is a device which is substantially equivalent to the non-powered breast aspirators Manufactured by Nastech Pharmaceutical Company, Inc. and Pro·Duct Health, Inc. used to elicit and collect nipple aspirate fluid from the excretory ducts (tubuli lactiferi or galactophori). The subject device shares similar design, material and operating characteristics as the predicates and devices to which the predicate devices

claim substantial equivalence. The subject device and predicate devices are comprised of polymer cups which are placed over the breast nipple and are used in conjunction with a non-powered mechanism for applying a gentle vacuum enabling expression of nipple aspirate fluid.

### Data Supporting Substantial Equivalence

Nastech conducted in-vitro and clinical studies to verify and validate the device design. The results of that testing supported the conclusion that the MASCT device is safe and effective for its intended use. In addition, it is substantially equivalent to the identified predicate for all relevant parameters (e.g. intended use, target population, materials, etc.).

The specific claim of determining and/or differentiating normal, premalignant and malignant cells based upon cytological is supported by a clinical study conducted by Nastech. The results, based on cytological evaluation and/or measurable weight changes on the sample collection membrane filter showed that all breasts evaluated (100%) with bilateral mammary aspiration technique using the Nastech MASCT yielded nipple aspirate fluid. Sample weights ranged from <1 to 37 mg and all samples evaluated cytologically were deemed to be clinically useful.

The mean mammary aspiration sample weight was 6.6 mg, with a range of <1 to 37 mg. While 13% of the samples were reported as <1 mg due to weighing variability from the small volume of the samples, all of the samples were sufficient for cytological analysis in that the pathologist was able to read all of the samples and cytology results were obtained. Fifty-eight of sixty samples or 97% (30 patients, right and left breasts) were Class I, and two of 60 (3%) were Class IIa. Both Class IIa findings were benign. Therefore, these clinical data support the claim that cells collected with the MASCT can be used in cytological examinations by trained individuals to identify differences in cells which may be associated with either premalignant or malignant conditions.

## **DEPARTMENT OF HEALTH & HUMAN SERVICES**



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

## MAY - 9 2003

Mr. Peter C. Aprile, R.Ph.
Vice President, Regulatory
and Quality Affairs
Nastech Pharmaceutical, Inc.
45 Adams Avenue
Hauppauge, New York 11788-3605

Re: K030443

Trade/Device Name: Mammary Aspiration Specimen Cytology Test

Regulation Number: 21 CFR 876.1075

Regulation Name: Gastroenterology-urology biopsy instrument

Regulatory Class: II Product Code: KNW Dated: February 10, 2003 Received: February 11, 2003

Dear Mr. Aprile:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97) you may obtain. Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

for Celia M. Witten, Ph.D., M.D.

Miriain C. Provost

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

# ·· INDICATIONS FOR USE STATEMENT

| 510(k) Number (if known)       | : K <u>030443</u>                       |  |
|--------------------------------|---|--|
| Device Name: Mammary A         | spiration Specime                       | n Cytology Test (MASCT)  |
| aspirate fluid for cytological | testing. The coll-                      | intended for use in the collection of nipple ected fluid can be used in the determination ignant versus malignant cells. |
| PAGE IF NEEDED)                | _                                       | S LINE – CONTINUE ON ANOTHER  of Device Evaluation (ODE)   |
|                                | , |  |
| Prescription Use               | OR                                      | Over-The-Counter Use   |
| (Per 21 CFR 801.109)           |   | (Optional Format 1-2-96)   |

Muram C Provost
(Division Sign-Off)
Division of General, Restorative
and Neurological Devices

510(k) Number